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(54) LIQUID CRYSTAL ORIENTATION FILM MANUFACTURING METHOD

(57)Abstract:

PURPOSE: To easily orientate even if the surface of a substrate is irregular by applying thermoplastic resin made of a plastic film on the substrate, pushing a mold having directional minute irregularity against the substrate while heating it and separating it from the substrate.

CONSTITUTION: Thermoplastic resin 14 such as polycarbonate is applied on a substrate 12 made of glass, and the applied thermoplastic resin 14 is heated by a heater 11 up to the glass transition temperature or higher. In addition, a mold 15 having directional minute irregularity 13 is pushed against the substrate 12. At this time, the height of the irregularity 13 is set to the thickness of the thermoplastic resin 14 having been applied. In addition, the molds 13, 15 having been pushed against the substrate is separated from the substrate, and the thermoplastic resin 14 is cooled at a room temperature. An orientated film is formed by forming irregularity by thus pushing the mold against the substrate. Therefore, this orientated film has reproductivity and uniformity, and even if the substrate 12 has irregularity, orientation can be executed. Therefore, an orientated film which hardly generates dust and has stable performance can be obtained.

